



Model 350ADA

Double Check Detector Assembly

Application

Designed for installation on water lines in fire protection systems to protect against both backsiphonage and backpressure of polluted water into the potable water supply. Model 350ADA shall provide protection where a potential health hazard does not exist. Incorporates metered by-pass to detect leaks and unauthorized water use.

Standards Compliance (Horizontal & Vertical)

- ASSE® Listed 1048
- AWWA Compliant C510 (with gates only), and C550
- CSA® Certified B64.5
- UL® Classified
- C-UL® Classified
- FM® Approved
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- NYC MEA 221-04M-2 (2 1/2" - 8")
- Meets the requirements of NSF/ANSI/CAN 61*
*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

By-Pass Backflow Assembly 3/4" Model 950XLD

Materials

| | |
|---------------------|--|
| Main valve body | Ductile Iron ASTM A 536 |
| Access covers | Ductile Iron ASTM A 536 |
| Coatings | NSF Approved electrostatic epoxy finish |
| Internals | Stainless steel, 300 Series NORYL™ |
| Fasteners & Springs | Stainless Steel, 300 Series |
| Elastomers | EPDM (FDA approved) Buna Nitrile (FDA approved) |
| Polymers | NORYL™ |

Features

| | |
|--|-----------------------------|
| Sizes: | 2 1/2", 3", 4", 6", 8", 10" |
| Maximum working water pressure | 175 PSI |
| Maximum working water temperature | 140°F |
| Hydrostatic test pressure | 350 PSI |
| End connections (Grooved for steel pipe) | AWWA C606 |
| (Flanged bolt pattern) | ASME B16.42 Class 150 |

*2 1/2" & 3" sizes use 4" body & reducer couplings



(with OS&Y gates)



LEAD FREE

NSF/ANSI/CAN 61



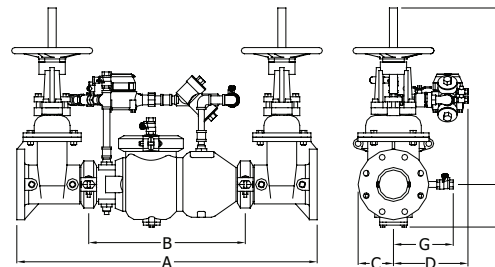
(with BG valves)

Options (Suffixes can be combined)

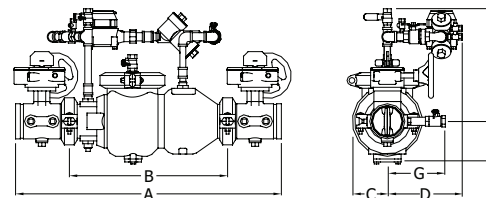
- with flanged end OS & Y gate valves (standard)
- L - less shut-off valves (grooved body connections)
- LM - less water meter
- with gallon meter (standard)
- CFM - with cu ft meter
- CMM - with cu meter meter
- G - with grooved end connections
- FG - with flanged inlet connection and grooved outlet connection
- PI - with Post Indicator Gate Valves
- BG - with grooved end butterfly valves with integral supervisory switches
- BF - with flanged end butterfly valves with integral supervisory switches

Accessories

- Repair kit (rubber only)
- Thermal expansion tank (Model XT)
- OS & Y Gate valve tamper switch (OSY-40)



MODEL 350ADA with OS&Y option



MODEL 350ADA with BG option

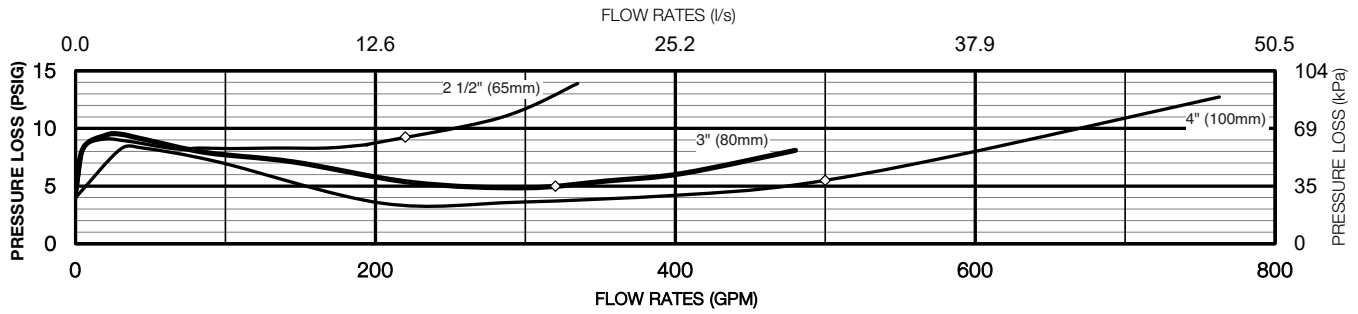
Dimensions & Weights (do not include pkg.)

| MODEL 350ADA SIZE | WEIGHT | | | | | | | | | | |
|-------------------|---------------------|-----|-------------------------|------|-------------------------|-----|--------------------------|-----|--------------------------|-----|-----|
| | LESS SHUTOFF VALVES | | OSY GATE VALVES FLANGED | | OSY GATE VALVES GROOVED | | BUTTERFLY VALVES FLANGED | | BUTTERFLY VALVES GROOVED | | |
| | lbs. | kg | lbs. | kg | lbs. | kg | lbs. | kg | lbs. | kg | |
| 2 1/2 | 65 | 105 | 48 | 192 | 87 | 184 | 83 | 157 | 71 | 147 | 67 |
| 3 | 80 | 104 | 47 | 210 | 95 | 200 | 91 | 162 | 73 | 148 | 67 |
| 4 | 100 | 91 | 41 | 230 | 104 | 204 | 93 | 147 | 66 | 139 | 63 |
| 6 | 150 | 141 | 64 | 362 | 164 | 332 | 151 | 246 | 111 | 215 | 98 |
| 8 | 200 | 302 | 137 | 762 | 346 | 738 | 335 | 491 | 223 | 445 | 202 |
| 10 | 250 | 355 | 161 | 1024 | 464 | 902 | 409 | 628 | 285 | 570 | 259 |

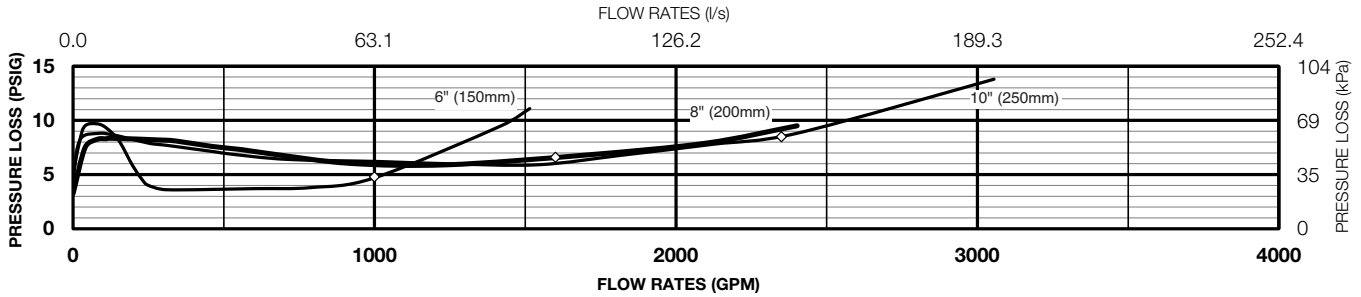
| MODEL 350ADA SIZE | DIMENSION (approximate) | | | | | | | | | | | | | | | | | | | | |
|-------------------|-------------------------|--------|-------------------------|--------|--------------------|--------|-----|-------|-----|--------|-------------|--------|---------------|--------|-------------------------|----------|-----|-------|-----|-------|-----|
| | A | | A WITH BUTTERFLY VALVES | | B LESS GATE VALVES | | C | | D | | E OS&Y OPEN | | E OS&Y CLOSED | | E WITH BUTTERFLY VALVES | | F | | G | | |
| | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | |
| 2 1/2 | 65 | 35 1/8 | 892 | 32 1/8 | 816 | 20 1/8 | 511 | 4 1/2 | 114 | 9 | 229 | 17 3/4 | 451 | 15 3/8 | 391 | 17 | 432 | 6 | 152 | 7 1/4 | 184 |
| 3 | 80 | 36 1/8 | 918 | 33 | 838 | 20 1/8 | 511 | 4 1/2 | 114 | 9 | 229 | 20 1/4 | 514 | 17 | 432 | 17 | 432 | 6 | 152 | 7 1/4 | 184 |
| 4 | 100 | 38 1/4 | 972 | 33 1/4 | 845 | 19 7/8 | 505 | 4 1/2 | 114 | 9 | 229 | 22 1/2 | 572 | 18 1/4 | 464 | 17 | 432 | 6 | 152 | 8 | 203 |
| 6 | 150 | 47 1/4 | 1200 | 40 1/4 | 1022 | 25 7/8 | 657 | 5 1/2 | 140 | 10 1/2 | 267 | 30 1/2 | 775 | 24 1/4 | 616 | 17 1/2 | 445 | 7 | 178 | 10 | 254 |
| 8 | 200 | 62 | 1575 | 55 | 1397 | 38 1/2 | 978 | 10 | 254 | 12 | 305 | 37 | 940 | 28 1/2 | 724 | 16 15/16 | 430 | 8 1/2 | 216 | 11 | 279 |
| 10 | 250 | 64 5/8 | 1641 | 59 | 1499 | 38 1/2 | 978 | 10 | 254 | 12 | 305 | 45 5/8 | 1159 | 34 3/4 | 883 | 16 15/16 | 430 | 8 1/2 | 216 | 12 | 305 |

Attention: Model 350ADA (grooved body) and Model 350DA (flange body) have different lay lengths.

MODEL 350ADA 2 1/2", 3" & 4" (STANDARD & METRIC)



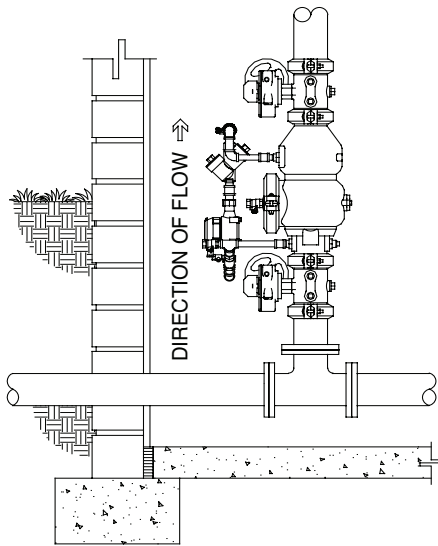
MODEL 350ADA 6", 8" & 10" (STANDARD & METRIC)



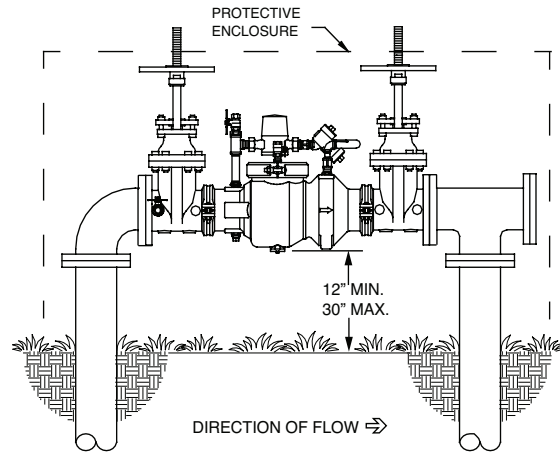
Typical Installation

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

| Capacity thru Schedule 40 Pipe (GPM) | | | | |
|--------------------------------------|----------|------------|----------|-----------|
| Pipe size | 5 ft/sec | 7.5 ft/sec | 10ft/sec | 15 ft/sec |
| 2 1/2" | 75 | 112 | 149 | 224 |
| 3" | 115 | 173 | 230 | 346 |
| 4" | 198 | 298 | 397 | 595 |
| 6" | 450 | 675 | 900 | 1351 |
| 8" | 780 | 1169 | 1559 | 2339 |
| 10" | 1229 | 1843 | 2458 | 3687 |
| 12" | 1763 | 2644 | 3525 | 5288 |



MODEL 350ADABG (Vertical Installation)



MODEL 350ADA (Outdoor Installation)

Specifications

The Double Check Detector Backflow Prevention Assembly shall be certified to NSF/ANSI/CAN 61, ASSE® Listed 1048, and supplied with full port gate valves. The main body and access cover shall be epoxy coated ductile iron (ASTM A 536), the seat ring and check valve shall be Noryl™ (NSF Listed), the stem shall be stainless steel (ASTM A 276) and the seat disc elastomers shall be EPDM. The first and second check valves shall be accessible for maintenance without removing the device from the line. The Double Check Detector Backflow Prevention Assembly shall be a ZURN WILKINS Model 350ADA.